

### **REMARKS**

Claims 1 and 3-19 are pending in the application and claims 1 and 3-11 stand rejected. Claim 1 has been amended and claim 2 has been canceled. In light of the aforementioned amendment and following remarks, Applicants earnestly solicit favorable reconsideration.

Applicants thank the Examiner for considering claims 12-19 to be allowable.

#### **On the Merits**

##### **Claim Rejections - 35 U.S.C. § 103(a)**

Claims 1-7 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Aizawa et al.* (Publication No. 2003-0038290 A1) in view of *Matsubara et al.* (Patent No. 6,337,536 B1). Applicants have amended claim 1 to include the features of dependent claim 2.

##### **Independent Claim 1:**

Independent claim 1 requires:

<sup>1</sup>An LED wherein a can type LED is provided with an anode, a cathode and an LED pedestal within a housing, and connection ends of the anode and the cathode lead at least to the outside of the housing, so that a voltage can be applied between the anode and the cathode via these connection ends, wherein

<sup>2</sup>the LED is characterized in that a condition of isolation is maintained between the connection end of said anode and the housing, as well as between the connection end of said cathode and the housing, and a lead end thermally connected to said LED pedestal is provided outside of the housing, and wherein

<sup>3</sup>the housing is electrically conductive, and

<sup>4</sup>the housing and the lead end of the LED pedestal are electrically connected to each other.

The Examiner largely uses the same rationale to reject claim 1 as used in the Office Action dated December 13, 2007. The Examiner uses *Aizawa* to reject most of claim 1, but acknowledges it does not disclose an electrically conductive housing (element 3, as labeled above). The Examiner then uses *Matsubara* to disclose a can-type device with an electrically conductive housing. *Matsubara* discloses that “a metal can-type package is also available for the LED of the present invention.” Column 10, lines 24 and 25.

Applicants respectfully submit that the cited references do not disclose or fairly suggest the claimed invention. That is, *Aizawa* does not disclose that:

a condition of isolation is maintained between the connection end of said anode and the housing, as well as between the connection end of said cathode and the housing...

As Applicants do not believe this feature to be disclosed by the references, Applicants ask the Examiner to specifically point out where he believes this feature is discussed.

However, in order to expedite prosecution of the application, Applicants have incorporated the features of dependent claim 2 into claim 1.

Claim 1 now requires the housing and the lead end of the LED pedestal to be **electrically connected** to each other. The Examiner maintains that this is shown by lead end (51d) of the LED pedestal (39). However Applicants respectfully disagree and submit that this feature is not shown by the references. That is, nowhere in the reference does it disclose where the LED pedestal is connected electrically to the housing (what the Examiner considers to be shown by

reference character 33). Applicants note that in paragraph [0044], *Aizawa* discloses that a heat sink 39 is connected to lead end 51d. However, Applicants respectfully submit that the reference itself does not disclose where, for example, lead end 51d is connected to a housing.

If the Examiner is aware of such a disclosure, Applicants ask the Examiner to specifically point out where he believes this feature to be disclosed.

As reference character 33 is made of an insulating material, i.e. synthetic resin, there is no reason why an electrical connection between the two components would exist. In fact, Applicants submit that it is illogical for there to exist an electrical connection between an insulator and a conductor, as the Examiner asserts is shown in *Aizawa*.

Additionally, one reason for the above recited electrical connection is described on page 5, lines 15 - 18 of the present specification:

It is desirable to make an electrical connection between the housing and the lead end of the LED pedestal of which the voltage is clamped to the ground or the like, in order to prevent the potential of the housing from becoming unstable.

Thus, the housing is clamped to ground to avoid any voltage build up which could result in a dangerous spark or unwanted heating of the housing.

However, if the resin housing of *Aizawa* is used, the housing could not be clamped to ground as desired by the claimed invention. Thus, Applicants respectfully submit that the structural features of claim 2 are not disclosed by *Aizawa* as the Examiner contends. That is, the LED pedestal of *Aizawa* is not electrically connected to the housing, as required by claim 2.

Furthermore, although the Examiner contends that *Matsubara* teaches using a metal housing, in order for the rejection to be proper, the Examiner still must show how the metal housing is connected to the lead end of the LED pedestal, as required by claim 1. As indicated above, Applicants respectfully submit that this is not shown in either of the above cited references.

Claims 8 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Aizawa et al. (Publication No. 2003-0038290 A1) in view of Matsubara et al. (Patent No. 6,337,536 B1) as applied to claim 1 above and further in view of Sonobe et al. (Patent No. 6,054,716).

As claims 8 and 9 ultimately depend from claim 1, the arguments presented above regarding claim 1 also apply to its dependent claims.

Claim 10 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Aizawa et al. (Publication No. 2003-0038290 A1) in view of Matsubara et al. (Patent No. 6,337,536 B1) as applied to claim 1 above and further in view of Sonobe et al. (Patent No. 6,054,716) and further in view of *Freyman et al.* (Patent No. 5,077,633).

As claim 10 depends from claim 1, the arguments presented above regarding claim 1 also apply to its dependent claims

In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

Application No.: 10/587,363  
Art Unit: 2875

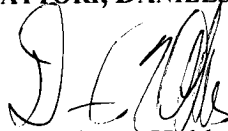
Amendment under 37 C.F.R. § 1.116  
Attorney Docket No.: 062711

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

**WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP**

A handwritten signature in black ink, appearing to read 'D. Hubbs', is positioned above the printed name.

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